



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,795	07/13/2006	Martin Howlid	14 0228-PCT-US	4505
28116 7590 08/11/2008				
WesternGeco L.L.C.				
Jeffrey E. Griffin				
10001 Richmond Avenue				
HOUSTON, TX 77042-4299				
EXAMINER				
HUGHES, SCOTT A				
ART UNIT		PAPER NUMBER		
3663				
MAIL DATE		DELIVERY MODE		
08/11/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/552,795

**Applicant(s)**

HOWLID ET AL.

**Examiner**

SCOTT A. HUGHES

**Art Unit**

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 61-64 is/are objected to.
- 8) ☒ Claim(s) 1-79 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claims 61-64 are objected to because of the following informalities:

Claims 61-64 are objected to as having improper numbering of the claims.

Applicant has two claims numbered as claim 61 and two claims numbered as 64. The first claim 64 also comes before any claim 63, and is therefore improperly numbered. Applicant's claim numbering of having claims 61, 61, 62, 64 (skipping 63), 63, 64, 65 ... is improper and should be corrected. For the purpose of this action, the first claim 61 will be regarded as claim 61A and the second claim 61 will be 61B. The first claim 64 will be 64A and the second claim 64 will be 64B.

Appropriate correction is required.

### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-31, drawn to a seismic survey system for use in water.

Group II, claim(s) 32-57, drawn to a method of positioning a source array in tow behind a vessel.

Group III, claim(s) 58-61A, 61B, 62, 64A, drawn to a system for changing the position of a source array towed by a vessel in a body of water.

Group IV, claim(s) 63, 64B, 65-79, drawn to a seismic survey system using a distance rope and winch.

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Groups I-IV do not fall within one of the allowable combinations of categories of inventions under PCT Rules 13.1 and 13.2. Applicant has multiple apparatus groups, and therefore applicant does not have one of the allowable combinations of categories of invention. Group I relates to a system comprising a source, steerable deflector, and positioning system. Group III relates to a system for changing position of a source array comprising a deflector, actuator, sensor for indicating position, and controller for providing commands to the actuator. Group IV relates to a seismic survey system using a distance rope and winch. Group II relates to a method of positioning a source array. As these are different systems and methods, they do not fall within the allowable combination of categories of one apparatus and one method.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Applicant is required to elect a single species of the following:

A. The embodiment wherein the deflector device controls the position of the source array that trails the steerable deflector device only.

Art Unit: 3663

B. The embodiment wherein the deflector device controls the position of the source array that is coupled to the front of the steerable deflector device only.

C. The embodiment wherein the deflector device controls the position of the source array that contains the deflector device only.

Upon election of A, B or C above, applicant is required to elect a single species of the following:

a. The embodiment wherein the desired position is the same position as in a previous survey only.

b. The embodiment wherein the desired position is a set distance from an edge of a previous survey only.

Upon election of a or b above, applicant is required to elect a single species of the following:

i. The embodiment wherein the one or more wings are in a generally vertical arrangement.

ii. The embodiment wherein the one or more wings are in a generally horizontal arrangement.

Upon election of i or ii above, applicant is required to elect a single species of the following:

AA. The embodiment wherein the acoustic transducer and receiver are pointed in a given direction.

BB. The embodiment wherein the acoustic transducer and receiver sweeps in many directions.

Applicant is required, in reply to this action, to elect a single species for each election give above to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner (61 is both 61A and 61B, and 64 is both 64A and 64B):

A – 1-2, 5-33, 36-79  
B – 1, 3, 5-32, 34, 36-79  
C – 1, 4-32, 35-79  
a – 1-9, 12-38, 41-66, 69-79  
b – 1-8, 10-37, 39-65, 67-79  
i – 1-16, 18-79  
ii – 1-15, 17-79  
AA – 1-30, 32-56, 58-78  
BB – 1-29, 31-55, 57-77, 79

The following claim(s) are generic: 1, 32, 58, 53.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The different species are each drawn to a different method or apparatus, and do not have a common special technical feature.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT A. HUGHES whose telephone number is (571)272-6983. The examiner can normally be reached on M-F 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571) 272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott A. Hughes/  
Examiner, Art Unit 3663